

INVASIVE SPECIES MANAGEMENT WITH VOLUNTEERS

Name of Project: High Desert Shrub-steppe Ecosystem Restoration on the Sheldon and Hart Mountain National Wildlife Refuges

Refuge/Wetland Management District: Sheldon National Wildlife Refuge located in northern Nevada and Hart Mountain National Antelope Refuge located in eastern Oregon

Project Description: The fragile shrub-steppe ecosystem in the Great Basin has been largely altered by post-settlement land uses consequently impacting the quality of wildlife habitat. The Sheldon and Hart Mountain refuges encompass nearly one million acres where past land use impacts have been somewhat less significant. Nonetheless, invasive plants on the refuges constitute a persistent and significant threat to the quality of wildlife habitat. Since 2009 limited but aggressive management of invasive plants has been conducted with the goals of restoring the shrub-steppe ecosystem within the refuges and safeguarding wildlife habitat. Maintaining an aggressive and rapid response is necessary for controlling expansion of invasive plants and preventing new infestations. Working together with refuge personnel, volunteers and partners continue to be essential for successful management of invasive plants on the refuges as well as on adjacent public and private lands. Surveys using volunteers and partners will be conducted on high risk refuge areas in 2012 to detect and map invasive plants. Site treatment will be conducted using strategies deemed most likely to achieve effective and rapid control. Funding will be used to purchase equipment and supplies and provide volunteer stipends.

Friends Groups, Volunteers and Other Partners: Volunteers (including refuge and SCA volunteers), Friends of Hart Mountain NAR, Order of the Antelope, Oregon Department of Agriculture, Lake County Cooperative Weed Management Area

Public Outreach and/or Environmental Education: Partners provide outreach and education in area communities about the threat of invasive plants to the quality and productivity of rangelands and guidance for their control.

Post-treatment Monitoring: Post-treatment monitoring will be conducted a minimum of two growing seasons to document treatment effectiveness and habitat recovery. Invasive plants discovered during monitoring will be re-treated. Recommendations will be provided for follow-up restoration needs on heavily impacted sites.

Criteria for Project Success:

1. Using GPS/GIS, inventory and map a minimum of 5,000 acres for invasive plants.
2. Conduct new control treatments on no less than 500 acres in 2012.
3. Acquire chemical application equipment to expand control efforts.
4. Conduct post-treatment monitoring to determine treatment effectiveness and determine need for additional treatment.

Budget:

Volunteers Stipend/Living allowance	\$7,000.00
Spray equipment (skid-mounted tank system, backpack sprayers)	\$4,000.00
Herbicide, adjuvant, dye, tank cleaner	\$2,000.00
Total funds requested	\$13,000.00